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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,901	11/16/2001	Yasunori Toda	011543	7804

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EXAMINER

HARMON, CHRISTOPHER R

ART UNIT PAPER NUMBER

3721

DATE MAILED: 09/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/987,901

Applicant(s)

TODA, YASUNORI

Examiner

Christopher R. Harmon

Art Unit

3721

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-3 and 5-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/24/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (JP 07-041244).

Hayashi discloses a pivotable swing arm 5 for guiding a continuous paper for accordion folding with equal widths as a result of the swinging action of the arm; table (below container 2) that receives the folded paper; see figures 2-3. The swing arm comprises an arm main body 5, sub-arm 8 (rectangular plates 84) that pivots along an axis (pivot axis at top of body 5, fig. 3) by operation of motor 10 disposed within the axis, see fig. 4. Hayashi does not directly disclose a telescoping motor but rather a telescoping actuator cylinder assembly 9. The examiner takes OFFICIAL NOTICE that motors and cylinders are well known in the art as alternates for actuating mechanical movement. It would have been obvious to one of ordinary skill in the art at the time of the invention to substitute a motor for the cylinder assembly in Hayashi for extending and retracting the sub-arm plates 84.

Regarding claim 3, Hayashi discloses lifting mechanism 7 for raising the swing arm so that it does not contact the surface of the folded continuous paper.

Regarding the limitation of “perforations”, note: “Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim.” *Ex parte Thibault*, 164 USPQ 666 (Bd. App. 1969). The apparatus of Hayashi is fully capable of performing folds to perforated paper along such perforations as claimed.

2. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi (JP 07-041244) in view of Martin et al. (US 5,062,597).

Regarding claim 5, Hayashi does not directly disclose a table that moves vertically nor has a detection mechanism for controlling vertical movement of the table. However Martin et al. describe a vertically controlled table 47; creasing mechanism 13; see figure 1. Sensors 40 detect proper positioning of the stacked paper and control raising and lowering of the table according to preset values; see column 5, lines 55-68.

The table control system of Martin et al. comprises a resetting system, which performs lowering and raising of the table upon detection positioning of the folded paper. The programmable control mechanism does not structurally limit the claimed invention. The term “error” is considered in a broad context ie. a fold error is considered present when the folded paper stack reaches over the desired height.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the table and controls of Martin et al. in the invention of Hayashi in order to manipulate the folds and the stacks without interference. Note that Hayashi solves this problem by different means ie. lifting mechanism 7.

Regarding claim 6, Hayashi does not directly disclose the device in use with a printing apparatus however Martin et al. discloses a printing apparatus in combination with a piling device. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the piling device of Hayashi in a continuous medium printing apparatus as taught by Martin et al. for stacking piles of printed matter.

Regarding claim 7, Hayashi does not directly disclose the use of a creasing mechanism for creasing the continuous paper in equal widths however Martin et al. teach a creasing mechanism 35; see figure 5. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the creasing mechanism of Martin et al. in the invention to Hayashi for insuring the folding of the continuous paper at the edge location.

Response to Arguments

3. Applicant's arguments with respect to all claims have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

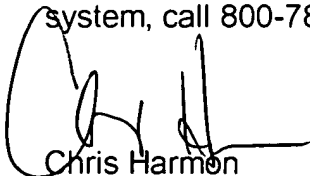
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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher R. Harmon whose telephone number is (571) 272-4461. The examiner can normally be reached on Monday-Friday from 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on (571) 272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Chris Harmon
Patent Examiner